

## ATTACHMENT J3

# Tyndall AFB Water Distribution System

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# J3 Tyndall AFB Water Distribution System

## J3.1 Tyndall AFB Overview

The Tyndall AFB is located in Bay County near Panama City in northwestern Florida. The main base and ancillary sites cover about 29,109 acres of land. The property is situated on a peninsula and is connected to the Panama City community area via the Dupont Bridge.

Named after Lt. Frank B. Tyndall, a World War I ace who was killed on active duty in 1930, construction began on the Army Air Corp's Tyndall Field in May 1941. The base was officially opened on December 6, 1941. As a member of the Air Education and Training (AETC) command, the primary mission of Tyndall Air Force Base is the training of Air Force pilots. Over the years many of the original facilities have been renovated to accommodate the changes in mission requirements and increased population. Facilities range from original 1941 construction to modern energy efficient office and industrial complexes.

Tyndall AFB hosts many tenant organizations with diversified functions and missions: HQ Air Force Civil Engineer Service Agency; HQ 1<sup>st</sup> Air Force; HQ Southeast Area Defense Sector; Air Force Research Laboratories (Armstrong and Wright Labs); 53<sup>rd</sup> Weapons Evaluation Group; 84<sup>th</sup> Radar Evaluation Squadron; and Detachments of the Minnesota Air National Guard, and Air Force Operations Test and Evaluation Group.

Tyndall AFB and its ancillary sites cover over 29,000 acres. The Tyndall AFB land and ownership are summarized in the following table.

Location	Type	Acres
Main Base	Public Domain	2,101
Main Base	Fee Condemned	26,661
Main Base	Fee Purchased	5
Main Base	Easement	57
Cove Gardens (N.I.C.)	Fee Condemned	33
Apalachicola (N.I.C.)	Lease	7
Carrabelle (N.I.C.)	Fee Purchased	33
Lynn Haven (N.I.C.)	Fee Purchased	203
Samatra (N.I.C.)	Permit	1
St. George Island (N.I.C.)	Fee Purchased	1
<b>Total =</b>		<b>29,102</b>

*N.I.C. - Not In Contract*

Tyndall AFB is similar in scale to a small community. There are approximately 655 facilities consisting of administration, commercial, schools and training, hospital and clinics, recreational, airfield support, fire protection, and transient living that total more than 3,680,000 square feet. In addition, there are six distinctive housing areas containing single and multi-family units. There are more than 560 buildings containing approximately 1085 individual housing units totaling more than 1,400,000 square feet.

The airfield consists of two paralleled runways and associated taxiway system. The outside (13L-31R) runway is 200 feet wide and 10,000 feet long. It has high intensity edge lights, high intensity threshold lights at both ends, lighted distance marker on both sides of the runway, and aircraft arresting barrier on both ends of the runway., with one end raised at a time. The outside runway has high intensity approach lighting system with sequenced flashers (ALSF-1) on both ends and pre-threshold light bars and terminating light bars on both ends. The inside runway (13R-31L) is 150 feet wide and 8075 feet long. It has high intensity edge lights, runway end lights on the 31L end and lighted distance markers on both sides of the runway. All airfield lighting is connected to a computer control system located at the Airfield Light Vault (Building 206). A new modern computer control system will be installed at AF vault this year. The outside and the inside runways are served by precision approach path indicators (PAPI) on both ends of the runways. The airfield also has one identification beacon mounted on existing elevated water tank, Facility No. 733 and four non-illuminated wind cones.

Tyndall AFB military personnel total 3951 and are primarily permanent party with some Air National Guard and transient students. Civilian support staff consists of 1210 government employees and 1510 contractors. In addition to actual employees, military and civilian, there are 5339 dependants (wives, husbands, and children).

Tyndall AFB is the largest employer in Bay County and the surrounding area. The economic impact on the surrounding communities and counties is estimated to be over \$422 million.

Many of the facilities on Tyndall AFB, which were built in the 1940's, are still occupied and many are being renovated to meet the ever-changing occupancy requirements. Several facilities are being torn down and replaced with newer, larger, more efficient facilities. In addition, new facilities are being built to meet the changing mission requirements with total facility square footage staying fairly constant due to newer facilities being approximately the same square footage as the facilities being torn down. Over the next three years, Tyndall AFB will be constructing four new facilities and an existing facility renovation to support a new mission requirement. These new facilities will increase Tyndall AFB net square footage by approximately 140,000 square feet. These new facilities will have minimal impact on the base water consumption.

## **J3.2 Water Distribution System Description**

### **J3.2.1 Water Distribution System Fixed Equipment Inventory**

The Tyndall AFB water distribution system consists of all appurtenances physically connected to the distribution system from the point in which the distribution system enters the Installation and Government ownership currently starts to the point of demarcation, defined by the Right of Way. The system may include, but is not limited to, pipelines, valves, fire hydrants, storage facilities, exterior backflow prevention devices, pumps, and meters. The actual inventory of items sold will be in the bill of sale at the time the system is transferred. The following description and inventory is included to provide the Contractor with a general understanding of the size and configuration of the distribution system. The Government makes no representation that the inventory is accurate. The Contractor shall

base its proposal on site inspections, information in the technical library, other pertinent information, and to a lesser degree the following description and inventory. Under no circumstances shall the Contractor be entitled to any service charge adjustments based on the accuracy of the following description and inventory. Housing Privatization is projected for Tyndall AFB in FY 05. A rough order of magnitude of the extent of the inventory that supports MFH is 20%.

Specifically excluded from the water distribution system privatization are:

- Irrigation sprinkler systems located around base.
- Four emergency well pumps located on main base.
- Interior Back Flow Prevention devices
- Water distribution system located in Military Family Housing areas
- Any water distribution systems located in the remote sites of Cove Gardens, Apalachicola, Carabelle, Lynn Haven, Samatra and St George Island

#### J3.2.1.1 Description

Tyndall AFB normally purchases all potable water for the main base complex from Bay County Utilities. In addition, there are six remote on-base sites that utilize their own wells.

Water enters the main base at Dupont Bridge, utilizing a single pipeline and feeds to the county ground water storage tank located northeast of Tyndall school across US Hwy 98. The primary county pump station then pumps to three distribution points along US Hwy 98 that connect to the Tyndall distribution system. In recent years, usage averaged about 1.0 to 1.7 million gallons per day (MGD). Delivered water pressure by the City averages about 70 psig; a pressure relief valve is installed at the master meters. Pressures on base range from about 50 to 55 psig. Three elevated storage tanks serve the main base for emergency use for fire protection should the main pump station fail.

Water is distributed throughout the main base through underground pipelines, ranging in size from 6 to 16 inches for the primary distribution system; in addition, there are smaller distribution lines and service lines to buildings and other facilities. The original system was installed in the early 1940's using well water as the source, and upgrades and replacements have been added as the area expanded over the years. There is no tracer wire, marker tape or cathodic protection installed on the system. The average depth of burial is 36".

Overall on the main base, there are an estimated 408,000 lineal feet of distribution and service lines, 260 hydrants, and over 740 isolation valves and check valves. The primary distribution system piping is reportedly about 80% cast iron and 20% PVC. Plastic piping has been used only for new housing construction, repairs and irrigation (lawn sprinkling) systems. Many PVC lawn sprinkler systems are being installed on base, and the number currently totals about 100; these are not included as part of the water system with respect to potential utility privatization.

There are four backup wells on the main base, available only for emergency use. These wells are connected to the primary distribution system and are flushed monthly, but are not currently permitted for use by the State. However, consumptive use permits have been issued by the Northwest Florida Water Management Agency (NFWFWMA) for emergency use only. The backup wells are not included with the sale of the system. The utility privatization contractor will be required to maintain the wells and operate them during emergency situations as part of a continuing service agreement. Emergency operation requirements are described in Tyndall AFB Contingency Response Plan 702.

Tyndall AFB has no water treatment facilities for the main base complex; Facility 909 was originally a water treatment plant, but is no longer operational. Water for fire protection is provided primarily by the potable water system. There are also two deluge pumping stations, dedicated for fire protection; however, these are not included as part of the water system with respect to potential utility privatization.

The water system limits for privatization are from the master meter stations to building connections, including the building service lines. Bay County maintains the master water meters and meter vault; however, the second vault containing the check valve pressure reduction valves are maintained by the Air Force and should be considered as part of the privatization process. There are a total of three master meter connections along US Highway 98. Point of demarcation for each will be at the outlet of the master meter box.

There are approximately 23 additional secondary meters on base that are read, maintained and owned by the Air Force. Meters that are found on site and that are not identified in table 5 and meters that are added as a result of new construction shall become the property of the contractor and should be added to the contract listing. The contractor is responsible for monitoring, repairing and maintaining all water meters.

The six remote on-base sites with well water systems are: Silver Flag; Wright Laboratories; Full-Scale Drone; Sub-Scale Drone; Alert Area; and Ammo Area. Each site has one well, and the wells are permitted by the NFWFWMA. Chlorination is provided by a chlorine gas system at Silver Flag, and by a hypochlorite feed system at each of the other five sites. A vertical turbine well pump is used at Silver Flag; submersible well pumps are used at the other five sites. Silver Flag has a 150,000 gallon elevated tank, and the other five sites each utilize a small hydropneumatic tank for storage. Silver Flag is served by a single well with a 150 gpm pump. The chlorination system uses chlorine gas and facilities include a Wallace & Tiernan V-100 chlorinator, chlorine booster pump and chlorine gas detector. Point of use reverse osmosis systems are used at several of these sites, including Silver Flag, Wright Laboratories, Sky Ten test area and the ammo storage area. To meet state requirements for removal of all wells, these sites will require connection to a permanent water source. Bay County has installed a new water line feeding the city of Mexico Beach just a few miles southeast of Tyndall. Tyndall will require all these sites be connected to the Bay County line and the wells put on stand-by for emergency use only. Contractor will be required to work with Bay County to get these connections made.

Known system problems on Tyndall AFB include low chlorine residuals (below 0.2 mg/l) in several areas, dead ends with no system flushing loops, inadequate shut-off and isolation

valves, fire hydrants in need of repair or replacement, and no dedicated water supply for several remote locations. Information available on the location of these deficiencies will be located in the technical library.

### J3.2.1.2 Inventory

**Table 1** provides a general listing of the major water distribution system fixed assets for the Tyndall AFB water distribution system included in the sale.

Table 1  
Fixed Inventory  
Water Distribution System Tyndall AFB

Component Description	Size	Quantity	Unit of Measure	Material Type1	Approximate Year Installed
Piping valves	3/4"	21	EA	CI	1958
Piping valves	3/4"	1	EA	CI	1969
Piping valves	1"	143	EA	CI	1959
Piping valves	1"	49	EA	PVC	1998
Piping valves	1-1/2"	1	EA	CI	1951
Piping valves	1-1/2"	7	EA	CI	1956
Piping valves	1-1/2"	1	EA	CI	1959
Piping valves	1-1/2"	1	EA	CI	1963
Piping valves	1-1/2"	1	EA	CI	1972
Piping valves	1-1/2"	1	EA	PVC	1987
Piping valves	1-1/2"	1	EA	PVC	1996
Piping valves	2"	15	EA	CI	1941
Piping valves	2"	14	EA	CI	1954
Piping valves	2"	7	EA	CI	1963
Piping valves	2"	5	EA	CI	1969
Piping valves	2"	4	EA	PVC	1976
Piping valves	2"	1	EA	PVC	1973
Piping valves	2"	2	EA	PVC	1981
Piping valves	2"	7	EA	PVC	1983
Piping valves	2"	6	EA	PVC	1986
Piping valves	2"	1	EA	CI	1959
Piping valves	2-1/2"	1	EA	CI	1941
Piping valves	2-1/2"	1	EA	CI	1963
Piping valves	2-1/2"	1	EA	PVC	1983
Piping valves	3"	1	EA	PVC	1973
Piping valves	3"	2	EA	CI	1943
Piping valves	3"	4	EA	CI	1956
Piping valves	3"	4	EA	CI	1967
Piping valves	3"	3	EA	PVC	1979
Piping valves	3"	1	EA	CI	1980
Piping valves	3"	2	EA	CI	1982
Piping valves	3"	5	EA	CI	1987
Piping valves	3"	2	EA	CI	1998
Piping valves	4"	2	EA	CI	1959
Piping valves	4"	1	EA	CI	1945

Component Description	Size	Quantity	Unit of Measure	Material Type1	Approximate Year Installed
Piping valves	4"	2	EA	CI	1951
Piping valves	4"	1	EA	CI	1956
Piping valves	4"	2	EA	CI	1958
Piping valves	4"	1	EA	CI	1962
Piping valves	4"	2	EA	CI	1965
Piping valves	4"	3	EA	CI	1987
Piping valves	4"	3	EA	CI	1998
Piping valves	6"	12	EA	CI	1959
Piping valves	6"	42	EA	CI	1941
Piping valves	6"	10	EA	CI	1951
Piping valves	6"	12	EA	CI	1956
Piping valves	6"	10	EA	CI	1958
Piping valves	6"	8	EA	CI	1959
Piping valves	6"	9	EA	CI	1963
Piping valves	6"	15	EA	CI	1969
Piping valves	6"	9	EA	CI	1975
Piping valves	6"	9	EA	CI	1979
Piping valves	6"	1	EA	CI	1980
Piping valves	6"	17	EA	CI	1987
Piping valves	6"	5	EA	CI	1993
Piping valves	6"	43	EA	CI	1998
Piping valves	8"	20	EA	CI	1959
Piping valves	8"	51	EA	CI	1941
Piping valves	8"	2	EA	CI	1945
Piping valves	8"	6	EA	CI	1951
Piping valves	8"	4	EA	CI	1954
Piping valves	8"	1	EA	CI	1956
Piping valves	8"	25	EA	CI	1958
Piping valves	8"	2	EA	CI	1959
Piping valves	8"	4	EA	CI	1962
Piping valves	8"	5	EA	CI	1965
Piping valves	8"	1	EA	CI	1979
Piping valves	8"	1	EA	CI	1983
Piping valves	8"	8	EA	CI	1987
Piping valves	8"	2	EA	CI	1991
Piping valves	8"	15	EA	CI	1998
Piping valves	10"	4	EA	CI	1959
Piping valves	10"	5	EA	CI	1941
Piping valves	10"	4	EA	CI	1958
Piping valves	10"	8	EA	CI	1959
Piping valves	10"	3	EA	CI	1998
Piping valves	12"	19	EA	CI	1941
Piping valves	12"	1	EA	CI	1955
Piping valves	12"	9	EA	CI	1962
Piping valves	12"	1	EA	CI	1979
Piping valves	12"	3	EA	CI	1987

Component Description	Size	Quantity	Unit of Measure	Material Type1	Approximate Year Installed
Piping valves	14"	1	EA	CI	1959
Piping valves	16"	4	EA	CI	1941
Backflow prevention device	1-1/2"	39	EA	CI	1959
Backflow prevention device	2-1/2"	35	EA	CI	1959
Backflow prevention device	3"	27	EA	CI	1959
Backflow prevention device	4"	90	EA	CI	1959
Backflow prevention device	6"	358	EA	CI	1959
Backflow prevention device	8"	249	EA	CI	1959
Backflow prevention device	10"	102	EA	CI	1959
Water distribution piping	3/4"	50	LF	PVC	1988
Water distribution piping	3/4"	200	LF	CU	2002
Water distribution piping	1"	7,500	LF	CI	1969
Water distribution piping	1"	13,877	LF	CI	1958
Water distribution piping	1"	280	LF	PVC	1985
Water distribution piping	1"	105	LF	PVC	1988
Water distribution piping	1"	239	LF	CI	1941
Water distribution piping	1"	95	LF	CI	1957
Water distribution piping	1"	125	LF	PVC	1956
Water distribution piping	1"	48	LF	PVC	1983
Water distribution piping	1"	1,500	LF	PVC	1998
Water distribution piping	1"	1,300	LF	PVC	2002
Water distribution piping	1-1/2"	2,439	LF	CI	1941
Water distribution piping	1-1/2"	1,031	LF	PVC	1983
Water distribution piping	1-1/2"	510	LF	PVC	1987
Water distribution piping	1-1/2"	608	LF	CI	1957
Water distribution piping	1-1/2"	713	LF	CI	1959
Water distribution piping	1-1/2"	139	LF	PVC	1985
Water distribution piping	1-1/2"	210	LF	CI	1963
Water distribution piping	1-1/2"	970	LF	CI	1966
Water distribution piping	1-1/2"	50	LF	PVC	1972
Water distribution piping	1-1/2"	243	LF	CI	1959
Water distribution piping	1-1/2"	2,034	LF	CI	1959
Water distribution piping	1-1/2"	500	LF	PVC	2002
Water distribution piping	2"	225	LF	CI	1963
Water distribution piping	2"	100	LF	CI	1958
Water distribution piping	2"	749	LF	CI	1959
Water distribution piping	2"	482	LF	PVC	1988
Water distribution piping	2"	570	LF	CI	1959
Water distribution piping	2"	15,409	LF	CI	1941
Water distribution piping	2"	1,000	LF	CI	1973
Water distribution piping	2"	1,019	LF	CI	1979
Water distribution piping	2"	127	LF	PVC	1981
Water distribution piping	2"	80	LF	PVC	1976
Water distribution piping	2"	838	LF	PVC	1985



Component Description	Size	Quantity	Unit of Measure	Material Type1	Approximate Year Installed
Water distribution piping	2"	1,760	LF	PVC	1998
Water distribution piping	2"	419	LF	CI	1969
Water distribution piping	2"	420	LF	PVC	1984
Water distribution piping	2"	283	LF	PVC	1986
Water distribution piping	2"	190	LF	PVC	1989
Water distribution piping	2"	270	LF	CI	1949
Water distribution piping	2"	2,162	LF	PVC	1983
Water distribution piping	2"	220	LF	CI	1945
Water distribution piping	2"	493	LF	CI	1963
Water distribution piping	2"	700	LF	PVC	2002
Water distribution piping	2-1/2"	282	LF	PVC	1978
Water distribution piping	2-1/2"	222	LF	PVC	1998
Water distribution piping	2-1/2"	23,871	LF	CI	1941
Water distribution piping	2-1/2"	160	LF	PVC	1983
Water distribution piping	2-1/2"	130	LF	CI	1953
Water distribution piping	2-1/2"	440	LF	CI	1957
Water distribution piping	3"	12,324	LF	CI	1941
Water distribution piping	3"	511	LF	PVC	1987
Water distribution piping	3"	425	LF	CI	1967
Water distribution piping	3"	204	LF	PVC	1976
Water distribution piping	3"	263	LF	PVC	1970
Water distribution piping	3"	183	LF	PVC	1998
Water distribution piping	3"	658	LF	CI	1959
Water distribution piping	3"	691	LF	PVC	1980
Water distribution piping	3"	408	LF	PVC	1982
Water distribution piping	4"	915	LF	PVC	1987
Water distribution piping	4"	335	LF	CI	1965
Water distribution piping	4"	635	LF	PVC	1998
Water distribution piping	4"	537	LF	PVC	1985
Water distribution piping	4"	663	LF	CI	1945
Water distribution piping	4"	1,168	LF	CI	1951
Water distribution piping	4"	4,930	LF	CI	1958
Water distribution piping	4"	939	LF	CI	1959
Water distribution piping	4"	5,693	LF	CI	1959
Water distribution piping	4"	31	LF	CI	1956
Water distribution piping	4"	449	LF	CI	1941
Water distribution piping	4"	80	LF	CI	1979
Water distribution piping	4"	87	LF	PVC	1989
Water distribution piping	6"	1,145	LF	PVC	1972
Water distribution piping	6"	1,493	LF	PVC	1975
Water distribution piping	6"	230	LF	CI	1983
Water distribution piping	6"	1,072	LF	CI	1985
Water distribution piping	6"	2,851	LF	CI	1959
Water distribution piping	6"	3,036	LF	CI	1967
Water distribution piping	6"	1,126	LF	CI	1990
Water distribution piping	6"	15,730	LF	CI	1958

Component Description	Size	Quantity	Unit of Measure	Material Type1	Approximate Year Installed
Water distribution piping	6"	9,721	LF	CI	1959
Water distribution piping	6"	5,793	LF	CI	1951
Water distribution piping	6"	26,794	LF	CI	1951
Water distribution piping	6"	746	LF	PVC	1979
Water distribution piping	6"	23,400	LF	CI	1943
Water distribution piping	6"	13,652	LF	PVC	1998
Water distribution piping	6"	5,614	LF	PVC	1980
Water distribution piping	6"	8,439	LF	PVC	1987
Water distribution piping	6"	2,461	LF	CI	1963
Water distribution piping	8"	130	LF	PVC	1979
Water distribution piping	8"	7,890	LF	CI	1959
Water distribution piping	8"	764	LF	CI	1962
Water distribution piping	8"	6,897	LF	CI	1951
Water distribution piping	8"	56,639	LF	CI	1943
Water distribution piping	8"	17,890	LF	CI	1958
Water distribution piping	8"	2,395	LF	PVC	1983
Water distribution piping	8"	1,787	LF	CI	1967
Water distribution piping	8"	132	LF	CI	1969
Water distribution piping	8"	7,045	LF	PVC	1987
Water distribution piping	8"	1,763	LF	PVC	1991
Water distribution piping	8"	5,650	LF	PVC	1998
Water distribution piping	10"	14,326	LF	CI	1959
Water distribution piping	10"	939	LF	CI	1941
Water distribution piping	10"	10,200	LF	CI	1958
Water distribution piping	10"	2,425	LF	CI	1959
Water distribution piping	10"	2,066	LF	CI	1957
Water distribution piping	12"	300	LF	PVC	1987
Water distribution piping	12"	492	LF	CI	1959
Water distribution piping	12"	3,376	LF	CI	1959
Water distribution piping	12"	1,950	LF	CI	1962
Water distribution piping	12"	597	LF	PVC	1979
Water distribution piping	12"	50	LF	CI	1955
Water distribution piping	12"	14,480	LF	CI	1943
Water distribution piping	14"	125	LF	CI	1959
Water distribution piping	14"	1,228	LF	CI	1955
Water distribution piping	14"	300	LF	CI	1959
Water distribution piping	14"	2182	LF	CI	1943
Water distribution piping	16"	904	LF	CI	1941
Water distribution piping	16"	145	LF	CI	1959
Water distribution piping	16"	63	LF	CI	1963
Fire hydrants	4.5" valve size	22	EA	CI	1960
Fire hydrants	4.5" valve size	67	EA	CI	1941
Fire hydrants	4.5" valve size	51	EA	CI	1951
Fire hydrants	4.5" valve size	10	EA	CI	1957
Fire hydrants	4.5" valve size	7	EA	CI	1956

Component Description	Size	Quantity	Unit of Measure	Material Type1	Approximate Year Installed
Fire hydrants	4.5" valve size	9	EA	CI	1958
Fire hydrants	4.5" valve size	7	EA	CI	1959
Fire hydrants	4.5" valve size	8	EA	CI	1963
Fire hydrants	4.5" valve size	7	EA	CI	1967
Fire hydrants	4.5" valve size	8	EA	CI	1969
Fire hydrants	4.5" valve size	5	EA	CI	1972
Fire hydrants	4.5" valve size	11	EA	CI	1979
Fire hydrants	4.5" valve size	1	EA	CI	1980
Fire hydrants	4.5" valve size	2	EA	CI	1984
Fire hydrants	4.5" valve size	21	EA	CI	1987
Fire hydrants	4.5" valve size	1	EA	CI	1990
Fire hydrants	4.5" valve size	3	EA	CI	1991
Fire hydrants	4.5" valve size	3	EA	CI	1998
Fire hydrants	4.5" valve size	1	EA	CI	1984
Fire hydrants	4.5" valve size	16	EA	CI	2002
Expansion Tanks	220 gallon	5	EA	Steel	1985
Water Storage Tank	250,000 gallon	2	EA		1943
Water Storage Tank	150,000 gallon	1	EA		1958
Chlorination Equipment		6	EA		1985
Water Supply Meters	1"	10	EA		1943
Water Supply Meters	1.5"	6	EA		1985
Water Supply Meters	2"	1	EA		1943
Water Supply Meters	2"	1	EA		1960
Water Supply Meters	3"	2	EA		1943
Water Supply Meters	3"	1	EA		1967
Water Supply Meters	6"	2	EA		1967
Meter Vault, precast concrete	5'x10'x6'	1	EA		1943

**Legend:**

CI - Cast Iron PVC - Polyvinyl Chloride  
EA - Each  
LF - Linear Feet

**Notes:**

1. Drawings furnished by Tyndall AFB do not indicate material types.  
Material types have been assumed and may not necessarily reflect the actual material in place.

### J3.2.2 Water Distribution System Non-Fixed Equipment and Specialized Tools

**Table 2** lists other ancillary equipment (spare parts) and **Table 3** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment, vehicles, and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment, vehicles, and tools.

**TABLE 2**  
Spare Parts  
Water System Tyndall AFB

Qty	Item	Make/Model	Description	Remarks
NONE				

**TABLE 3**  
Specialized Vehicles and Tools  
Water Distribution System Tyndall AFB

Description	Quantity	Location	Maker
NONE			

### J3.2.3 Water Distribution System Manuals, Drawings, and Records

**Table 4** lists the manuals, drawings, and records that will be transferred with the system.

**TABLE 4**  
Manuals, Drawings, and Records  
Water Distribution System Tyndall AFB

	Item	Description	Remarks
1	Deficiencies Report	Chlorine Deficiencies Study April 1999	Performed by Envirossoft - Engineering
2	Water System Drawings	Utility System drawings A1U.dwg through G7U.dwg	Drawings in AutoCAD 2000 format
3	Water Meter Readings	Water Meter Readings for last three years	EXCEL Format available

## J3.3 Specific Service Requirements

The service requirements for the Tyndall AFB water distribution system are as defined in the Section C, *Description/Specifications/Work Statement*. The following requirements are specific to the Tyndall AFB water distribution system and are in addition to those found in Section C. If there is a conflict between requirements described below and Section C, the requirements listed below take precedence over those found in Section C.

1. The emergency wells are not included as part of the water system with respect to potential utility privatization. However, the contractor shall be responsible for the maintenance and operation of the wells to maintain the integrity of the water system during emergencies. The contractor will also be required to support and assist in disaster recovery or emergency situations that require system shut-off or temporary

- connection or disconnects. Emergency operation requirements are described in Tyndall AFB Contingency Response Plan 702.
2. The six remote on-base site wells will be in continuous use until such time as the off-site installations can be connected to a permanent water source. Once connected to a permanent water source, these wells will be used for emergency only.
  3. The government currently has agreements with several companies for the placement of antennas on water towers 733 and 848. The antennas are for cellular phone communications around Tyndall AFB, cable television, and base operations and communications. Contractor will be required to honor these agreements and negotiate with the owners for their continued use. Tower at facility 733 has the airfield lighting beacon on top. As airfield lighting is not part of the electrical privatization effort (Ref. Section J1), this beacon will still belong to the government. Per FAA requirements, this beacon must remain in place. Reference Right of Way document, section J41 paragraphs 4.4 and 4.5.
  4. Tyndall AFB has 49 reimbursable customers who rely on the base for water supply. They in turn pay for water and maintenance cost monthly. Only 26 of the respective facilities are metered. Meter installation will be required to support reimbursements on facilities listed in Table 6 below.
  5. The contractor shall follow the Environmental Impact Analysis Process (EIAP) to ensure compliance with the National Environmental Policy Act (NEPA). The contractor shall submit an AF Form 813, Request for Environmental Assessment, for all new actions and/or changes to existing conditions, e.g., new construction projects. Requirements are outlined in AFT 32-7061 Environmental Impact Analysis Process.
  6. The contractor shall support and participate in the Environmental Compliance Assessment and Management Program (ECAMP). Evaluations are performed every year by an external team (personnel not of the base) and/or an internal team (base personnel). All base organizations are evaluated for compliance with federal, state, local and Air Force environmental regulations and laws. The contractor shall support the ECAMP process.
  7. The contractor shall maintain water quality IAW the Environmental Protection Agency (EPA), Florida Department of Environmental Protection (FDEP), Northwest Florida Water Management District (NFWMD) and other environmental regulatory permit requirements. The contractor shall follow the most restrictive guidance in cases of conflicting guidance.
  8. Water testing and sampling reports shall be submitted by the 10th day of each month. Water testing shall be done in accordance with (IAW) Florida Administrative Codes 62-550 and 62-555
  9. The contractor shall instruct employees in utilities conservation practices IAW TAFBPAM 32-1001. The contractor shall be responsible for operating under conditions that preclude the waste of utilities.

10. Should the contract provider not be able to perform utility service due to business problems the government reserves the right to perform work with its own resources to maintain the system for continuation of service. Contractor business problems may consist of but is not limited to: bankruptcy, receivership, employee strike, etc. Contractor is required to notify the government with-in 24 hours of such occurrence. Further details can be found in paragraph H.6 of this contract.
11. Contractor is required to get prior approval of all radio frequencies before using any communications devices on Tyndall. No narrow band communications may be used or amplified RF equipment. Certain areas of the base have cell phone dead zones.
12. The contractor must coordinate all capital improvement planning and design efforts with the installation.
13. All hazardous materials used by the utility contractor will be handled as required by law and /or base safety. Contractor will be held liable for any misuse or handling of hazardous materials.
14. Lightning, grounding and cathodic protection shall be used on specific utilities as required by industry standards.
15. The government will be notified of all scheduled utility outages 48 hours in advance. The government reserves the right to have the scheduled outage postponed should the outage interfere with mission critical operations.
16. Contractor shall establish quality control measures, which monitor proper maintenance of the utility system or systems. Leak inspections are to be a part of this plan and performed and reported annually.
17. The Contractor shall perform flow testing and marking of fire hydrants IAW National Fire Protection Association standards/recommended practices. The government reserves the right to review flow test records. The Contractor shall be required to meet all unique and specific fire-flow requirements for the base, which will be listed and available in the Utilities Privatization Technical Library.

### J3.4 Current Service Arrangement

- Provider Name: Bay County Utilities Department (Main Base)  
Panama City Water Department (Cove Gardens)
- Average Annual Usage: 468,000 Kgal (Main Base)
  - High Month: May 57,000 Kgal
  - Low Month: February 22,000 Kgal
- Annual Usage Fluctuations: +/- 3%

Bay County Utility Department has constructed a five million gallon water storage tank on Tyndall AFB and revised the points of delivery. This tank also serves the City of Mexico Beach and will serve the Tyndall AFB remote sites as needed. A memorandum of agreement has been signed between the government and Bay County to possibly change the demarcation point of delivery for Tyndall AFB. Contractor may be required to negotiate with Bay County on the best scenario for changing the demarcation point or points of delivery.

Tyndall AFB will retain any and all permits associated with the remaining government owned water system. Contractor will be required to obtain their own permits to operate Tyndall AFB water systems. (i.e. testing, sampling, operation, hazardous materials, etc.)

## J3.5 Secondary Metering

### J3.5.1 Existing Secondary Meters

**Table 5** provides a listing of the existing (at the time of contract award) secondary meters that will be transferred to the Contractor. The Contractor shall provide meter readings for all secondary meters IAW Paragraph C.3 and J3.6 below.

TABLE 5  
Existing Secondary Meters  
Water Distribution System Tyndall AFB

Facility ID	Facility Name/Description	Facility ID	Facility Name/Description
0	Beach Bath House	1465	Hospital
1	Fam-Camp Area	1506	Class Six Store
2	Riding Stable Area	1550	NCO Club Mtr 1
96	Burger King	1550	NCO Club Mtr 2
913	Tyndall AFB Fed Credit Union	1703	Old Sewer Plant
928	Car Wash	2699	Yacht Club
939	Base Gym	3029	Golf Course Area
950	Commissary	3223	Youth Center
950	Base Exchange	3350	Wood Manor Shoppette
968	Main Gas Station	5008	Shoppette
1410	Child Development Center	5012	Bonita Bay
1454	Officers Club		

### J3.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 6**. New secondary meters shall be installed IAW Paragraph C.13, Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3 and J3.6 below.

TABLE 6

New Secondary Meters  
Water Distribution System Tyndall AFB

Meter Location	Meter Description
Bldg 149, Aero Club	Reimbursable Customer
Bldg 485, SEADS	Reimbursable Customer
Bldg 647, 1 <sup>st</sup> Air Force HQ	Reimbursable Customer
Bldg 824, Laundry	Reimbursable Customer
Bldg 852, Clinic	Reimbursable Customer
Bldg 856, Clinic	Reimbursable Customer
Bldg 914, Bowling Alley	Reimbursable Customer
Bldg 1027, Recreation Center	Reimbursable Customer
Bldg 1305, Clinic	Reimbursable Customer
Bldg 1307, Clinic	Reimbursable Customer
Bldg 1404, Clinic	Reimbursable Customer
Bldg 1406, Clinic	Reimbursable Customer
Bldg 1467, Medical Supply	Reimbursable Customer

## J3.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. Invoice (IAW G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 15<sup>th</sup> of each month for the previous month. Invoices shall be submitted to:

Name: 325 CES/CERF  
Address: 119 Alabama Ave. Stop 42  
Tyndall AFB FL. 32403-5005  
Phone number: (850) 283-2177:

2. Outage Report. The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall be submitted by the 15<sup>th</sup> of each month for the previous month. Outage reports shall be submitted to:

Name: 325 CES/CEOE  
Address: 119 Alabama Ave. Stop 42  
TYNDALL AFB 32403-5005  
Phone number: (850)-283-4611

3. Meter Reading Report. The monthly meter reading report shall show the current and previous month readings for all identified secondary meters. The Contractor's monthly



meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 7<sup>th</sup> of each month for the previous month. Meter reading reports shall be submitted to:

Name: 325 CES/CEOE  
Address: 119 Alabama Ave. Stop 42  
TYNDALL AFB 32403-5005  
Phone number: (850)-283-4611

4. System Efficiency Report. If required by Paragraph C.3, the Contractor shall submit a system efficiency report in a format proposed by the Contractor and accepted by the Contracting Officer. System efficiency reports shall be submitted by the 25<sup>th</sup> of each month for the previous month. System efficiency reports shall be submitted to:

Name: 325 CES/CEOE  
Address: 119 Alabama Ave. Stop 42  
TYNDALL AFB 32403-5005  
Phone number: (850)-283-4611

5. Environmental Protection Requirements. All new actions and/or changes to existing conditions, e.g., new construction projects, spills, etc. must be reported in writing IAW EPA requirements. Requirements are outlined in AFT 32-7061 Environmental Impact Analysis Process. All reports and requests must be submitted to:

Name: 325 CES/CEV  
Address: 119 Alabama Ave. Stop 42  
Tyndall AFB FL 32403-5005  
Phone number: (850) 283-4354

## J3.7 Water Conservation Projects

IAW Paragraph C.3, Utility Service Requirement, the following projects have been implemented by the Government for conservation purposes.

Tyndall currently has two energy service contractors performing upgrades to systems to eliminate waste and reduce consumption. Following the base water conservation plan, these contractors may require the services of the new distribution system owner to modify the system to meet energy standards. These negotiations will be worked out between the two contractors with minimal government intervention on an as needed basis.

## J3.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the Tyndall AFB boundaries. Right of Way documents describe the boundaries of Tyndall proper.

## J3.9 Off-Installation Sites

No off-installation sites are included in the sale of the Tyndall AFB water distribution system.

## J3.10 Specific Transition Requirements

IAW Paragraph C.13, Transition Plan, **Table 7** provides a listing of service connections and disconnections required upon transfer.

**TABLE 7**  
Service Connections and Disconnections  
Water Distribution System Tyndall AFB

Location	Description
NONE	

## J3.11 Government Recognized System Deficiencies

**Table 8** provides a listing of system improvements that the Government has planned. The Government recognizes these improvement projects as representing current deficiencies associated with the Tyndall AFB water distribution system. If the utility system is sold, the Government will not accomplish these planned improvements. The Contractor shall make a determination as to its actual need to accomplish and the timing of any and all such planned improvements. Capital upgrade projects shall be proposed through the Capital Upgrades and Renewal and Replacement Plan process and will be recovered through [Schedule L-3](#). Renewal and Replacement projects will be recovered through [Sub-CLIN AB](#).

**TABLE 8**  
System Deficiencies  
Water Distribution System Tyndall AFB

Project Location	Project Description
Hospital and Child Development Center Loop	Low chlorine residuals (below 0.2 mg/l) in several areas.
Bonita Bay Area	Dead ends with no system flushing loop
Base Wide	Fire Hydrants in need of repair or replacement
Remote Areas	No dedicated water supply for several remote locations. This is a DEP deficiency,